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#### UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MUTHUKUMAR G. KAUNDINYA and EDWARD WANG

Appeal 2016-000917<sup>1</sup> Application 12/949,668<sup>2</sup> Technology Center 3600

Before NINA L. MEDLOCK, CYNTHIA L. MURPHY and AMEE A. SHAH, *Administrative Patent Judges*.

MEDLOCK, Administrative Patent Judge.

### **DECISION ON APPEAL**

#### STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 45–59, 61–65, 67, and 68. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

<sup>&</sup>lt;sup>1</sup> Our decision references Appellants' Appeal Brief ("App. Br.," filed March 27, 2015) and Reply Br. ("Reply Br.," filed October 26, 2015), and the Examiner's Answer ("Ans.," mailed August 25, 2015) and Final Office Action ("Final Act.," mailed December 2, 2014).

<sup>&</sup>lt;sup>2</sup> Appellants identify Charles Schwab & Co., Inc. as the real party in interest. App. Br. 3.

### **CLAIMED INVENTION**

Appellants' claimed invention "relates to a system and method of providing for the generation, and management of alerts which can be utilized by customer representatives, and which provides for tracking the customer representatives activities in connection with the generated alerts" (Spec. 1, 11. 15–18).

Claims 45, 52, and 62 are the independent claims on appeal.

Claim 45, reproduced below, is illustrative of the claimed subject matter:

45. In a computer network a method for utilization and tracking of alerts, the method comprising:

analyzing, using one or more processors, customer data of a customer at a first point in time;

automatically generating a first alert identifying potential business opportunities based on customer initiated actions in response to analyzing the customer data, the first alert belonging to a first type of alert from a plurality of different types of alert, the first type of alert being associated with a run cycle time, an expiration time, and a suppression time that are all different from one another;

storing the first alert in an alert tracking database; providing the first alert to a customer representative;

when no action is taken for the first alert before the expiration time expires:

automatically removing the first alert from being provided to the customer representative, and

updating the alert tracking database to indicate the first alert has expired; and

when a customer representative input is received to indicate an action resulting in closing of the first alert has been taken for the first alert before the expiration time expires:

updating an action status of the first alert in the alert tracking database based on the customer representative input,

analyzing the customer data at a second point in time that is a run cycle time after the first point in time, determining that a second alert belonging to the first type of alert is triggered by the customer data at the second point in time, and

preventing the second alert from being provided to the customer representative for an amount of the suppression time.

### **REJECTIONS**

Claims 45–59, 61–65, 67, and 68 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 45, 52–54, 61–63, and 67 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rothermel et al. (US 2006/0143034 A1, pub. June 29, 2006) (hereinafter "Rothermel") and Cheung et al.

(US 2004/0061716 A1, pub. Apr. 1, 2004) (hereinafter "Cheung").

Claims 46–51, 55, and 64 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rothermel, Cheung, and Donoho et al.

(US 2004/0177053 A1, pub. Sept. 9, 2004) (hereinafter "Donoho").

Claims 56 and 65 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rothermel, Cheung, Donoho, and Melchione et al. (US 5,930,764, iss. July 27, 1999) (hereinafter "Melchione").

Claims 57–59 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rothermel, Cheung, and Voudrie (US 2005/0273409 A1, pub. Dec. 8, 2005).

#### **ANALYSIS**

Non-Statutory Subject Matter

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101

to include an implicit exception: "[1]aws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp.*, 134 S. Ct. at 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination" to determine whether there are additional elements that "transform the nature of the claim' into a patent-eligible application." *Alice Corp.*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 78).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.

See Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Here, in rejecting the pending claims under § 101, the Examiner analyzed the claims using the *Mayo/Alice* two-step framework, in accordance with the guidance set forth in the PTO's June 25, 2014

"Preliminary Examination Instructions in view of the Supreme Court Decision in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*" in effect at the time the Final Office Action was mailed. Specifically, the Examiner found that the claims are directed to "tracking and generating alerts, deciding when alerts expire, and deciding when alerts should be suppressed," i.e., "a method of [organizing] human activity," and, therefore, an abstract idea; and that the additional elements or combinations of elements beyond the abstract idea do not amount to "significantly more" than the abstract idea itself (Final Act. 5–6).

Independent Claims 45 and 52 and Dependent Claims 46-51, 53-59, and 61

We are not persuaded, as an initial matter, by Appellants' argument that the Examiner erred in rejecting claim 45 under 35 U.S.C. § 101 because "the claims recite a very specific way of managing alerts, and clearly do not seek to preempt others from tracking and generating alerts using other techniques" (App. Br. 8; *see also* Reply Br. 2–4).

There is no dispute that the Supreme Court has described "the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption." *See Alice Corp.*, 134 S. Ct. at 2354. However, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354). Although "preemption may signal patent ineligible subject matter,

the absence of complete preemption does not demonstrate patent eligibility." *Id.* 

We also are not persuaded of Examiner error by Appellants' argument that the claimed features improve the functioning of the computer itself (App. Br. 9–11; see also Reply Br. 4–5). Appellants assert that "suppressing alerts can reduce the number of alerts that are tracked and managed, because subsequent alerts on similar issues that a customer representative has already contacted the customer about would not be generated" and that "[d]ue to the reduced number of alerts that are tracked and managed, the computational load on the alert computer is also reduced," thereby "improving the alert computer's operational efficiency" (App. Br. 10). But, even accepting Appellants' argument, there is a fundamental difference between computer functionality improvements, on the one hand, and uses of existing computers as tools to perform a particular task, on the other. Indeed, the Federal Circuit applied this distinction in *Enfish* in rejecting a § 101 challenge at the step one stage in the *Alice* analysis because the claims at issue focused on a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data, and not merely on asserted advances in uses to which existing computer capabilities could be put. Enfish, 822 F.3d at 1335–36.

We find no parallel here between independent claim 45 and the claims in *Enfish* nor any comparable aspect in claim 45 that represents "an improvement to computer functionality," i.e., an improvement in the way a computer carries out its basic functions. The alleged advantages that Appellants tout do not concern an improvement to computer capabilities but

instead relate to an alleged improvement in tracking the utilization of alerts for which a computer is used as a tool in its ordinary capacity.<sup>3</sup>

To the extent that Appellants maintain that the limitations of claim 45 necessarily amount to "significantly more" than an abstract idea because the claimed apparatus is allegedly patentable over Cheung (App. Br. 11), Appellants misapprehend the controlling precedent. Although the second step in the *Mayo/Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90.

<sup>&</sup>lt;sup>3</sup> Referencing the USPTO's January 27, 2015 Examples: Abstract Ideas (available at https://www.uspto.gov/sites/default/files/documents/ abstract\_idea\_examples.pdf), Appellants point to claim 1 in Example 3 as an instance in which a claim was deemed patent-eligible because the claim "allows the computer to use less memory than required for prior masks, [and] results in faster computation time without sacrificing the quality of the resulting image as occurred in prior processes" (Reply Br. 4–5). However, claim 1 is a hypothetical claim modeled after the technology in Research Corporation Technologies Inc. v. Microsoft Corp., 627 F.3d 859 (Fed. Cir. 2010), not an actual claim at issue in that case. The Federal Circuit determined, in Research Corporation, that the claims were patent-eligible, not because they allowed the use of less computer memory or resulted in faster computation time, but instead because the claimed invention presented "functional and palpable applications in the field of computer technology" and addressed "a need in the art for a method of and apparatus for the halftone rendering of gray scale images in which a digital data processor is utilized in a simple and precise manner to accomplish the halftone rendering." Id. at 868-69.

The USPTO's "July 2015 Update: Subject Matter Eligibility," instructs examiners to refer to the body of case law precedent in order to identify abstract ideas by way of comparison to concepts already found to be abstract" (July 2015 Update at 3). And the Update further states that "[t]his discussion is meant to . . . ensure that a claimed concept is not identified as an abstract idea unless it is similar to at least one concept that the courts have identified as an abstract idea (*id.*).

Appellants ostensibly argue that the rejection under § 101 cannot be sustained because "the Examiner has failed to show how the claims as a whole are similar to a concept that the courts have identified as a patent ineligible abstract idea" (Reply Br. 5–6). However, an Examiner's failure to follow the Director's guidance is appealable only to the extent that the Examiner has failed to follow the statutes or case law. To the extent the Director's guidance goes beyond the case law and is more restrictive on the Examiner than the case law, that failure of the Examiner to follow those added restrictions is a matter for petition to the Director. We are aware of no controlling precedent, nor do Appellants identify any controlling case law, that precludes an examiner from finding a claimed concept patent-ineligible unless it is similar to a concept that a court has identified as patent-ineligible.

We are not persuaded for the reasons set forth above that the Examiner erred in rejecting independent claim 45 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection of independent claim 45 and dependent claims 46–51, which are not argued separately.

Appellants argue that independent claim 52 and its dependent claims 53–59, and 61 are patent-eligible for the same reasons set forth with

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respect to independent claim 45. Therefore, we also sustain the Examiner's rejection of those claims under § 101.

*Independent Claim 62 and Dependent Claims 63–65, 67, and 68* 

Appellants argue that claim 62 is patent-eligible because it provides an improvement to the functioning of the computer itself (App. Br. 11–12). That argument is substantially similar to the argument set forth with respect to claim 45 and is similarly unpersuasive. Therefore, we sustain the Examiner's rejection under 35 U.S.C. § 101 of independent claim 62 and dependent claims 63–65, 67, and 68, which are not argued separately.

#### **Obviousness**

# Independent Claim 45

We are persuaded by Appellants' argument that the Examiner erred in rejecting independent claim 45 under 35 U.S.C. § 103(a) because the combination of Rothermel and Cheung fails to disclose or suggest "preventing the second alert from being provided to the customer representative for an amount of the suppression time," as recited in claim 45 (App. Br. 13–15).

In rejecting claim 45 under 35 U.S.C. § 103(a), the Examiner cites Rothermel as disclosing substantially all of the limitations of the claim (Final Act. 8–15). However, the Examiner acknowledges that Rothermel does not explicitly disclose "preventing the second alert from being provided to the customer representative for an amount of the suppression time" (*id.* at 13). And the Examiner cites Cheung to cure the deficiency of Rothermel (*id.* at 13–14 (citing Cheung ¶¶ 30, 35, and 43; Figs. 5A and 8A; claim 10)). The Examiner further notes that because claim 45 includes conditional language, i.e., suppression of the second alert only occurs "when a customer

representative input is received to indicate an action resulting in closing of the first alert has been taken for the first alert before the expiration time expires," the step of "preventing the second alert from being provided to the customer representative for an amount of the suppression time" need not be found in the prior art because the step is not performed if no action is taken for the first alert before the expiration time expires (Ans. 7–8).

During examination before the USPTO, claims are given their broadest reasonable interpretation consistent with the specification. *In re Abbott Diabetes Care, Inc.*, 696 F.3d 1142, 1148 (Fed. Cir. 2012); *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). Moreover, conditional steps employed in a method claim need not be found in the prior art if, under the broadest reasonable interpretation, the method need not invoke those steps. *See Ex Parte Schulhauser*, No. 2013-007847, 2016 WL 6277792 (PTAB April 28, 2016) (precedential).

Here, the "suppression" step that Appellants maintain is not disclosed or suggested by the cited references is a conditional method step, and is performed only "when a customer representative input is received to indicate an action resulting in closing of the first alert has been taken for the first alert before the expiration time expires." The broadest reasonable interpretation of claim 45 includes situations that fail to satisfy this condition precedent, and in those situations, the disputed conditional method step is not performed. *See Schulhauser*, 2016 WL 6277792, at \*3–6 (concluding that the broadest reasonable interpretation of a claim encompassed situations in which conditional method steps "need not be reached"). Because the broadest reasonable interpretation of claim 45 does not require performing the conditional "suppression" step at issue, the Examiner is not required to

present evidence of the obviousness of this step. *See Schulhauser*, 2016 WL 6277792, at \*4 ("The Examiner did not need to present evidence of the obviousness of the remaining method steps of claim 1 that are not required to be performed under a broadest reasonable interpretation of the claim.").

This notwithstanding, we agree with Appellants that even if suppression of the second alert is considered a conditional step, claim 45 requires determining whether an action resulting in the closing of the first alert has been taken before the expiration time expires (Reply Br. 7). The Examiner cites paragraph 77 of Rothermel as disclosing that an alert is deleted after the expiry time (Final Act. 9). But we find nothing in the cited portions of Rothermel that discloses or suggests that the Rothermel system checks whether an action resulting in the closing of the first alert has been taken before the expiration time expires.

Moreover, even putting the conditional language aside, we are persuaded by Appellants' argument that the snooze time interval in Cheung is "fundamentally different" from the claimed suppression time (App. Br. 14).<sup>4</sup> In this regard, we agree with Appellants that rather than preventing a second alert from being presented to a user, "Cheung simply takes an

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<sup>&</sup>lt;sup>4</sup> Cheung is directed to a centralized notification system in which reminders and alerts from different source applications are presented to a user in a uniform format (Cheung, Abstract, ¶ 4). For example, Cheung discloses that alerts from MESSENGER<sup>TM</sup>, OFFICE<sup>TM</sup>, and OUTLOOK<sup>TM</sup> applications can be detected by a central notification manager and be presented as a popup window on a user interface (*id.* ¶¶ 27–30). Cheung further discloses that "[f]or notifications or tasks that are to be performed by a particular date and time, the user can select snooze control button 132 to defer the reminder to a later date/time" (*id.* ¶ 40). The user can also select a snooze time interval to indicate how long the reminder is deferred (*id.* ¶ 9).

existing alert that has already been generated (i.e.[,] a first alert), and delays that first alert from being displayed on a user interface until after the snooze time interval" (*id.*). In other words, Cheung takes an alert that is already being displayed on a user interface, and hence already provided to a user, and hides it from view until a later time at which the same alert will reappear on the user interface (Reply Br. 7); this, in our view, is different from "preventing [a] second alert [triggered by customer data at a second point in time] from being provided to the customer representative for an amount of the suppression time," as recited in claim 45.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claim 45 under 35 U.S.C. § 103(a).

Independent Claims 52 and 62 and Dependent Claims 53, 54, 63, and 67

Independent claims 52 and 62 include language substantially similar to the language of claim 45, and stand rejected based on the same rationale applied with respect to claim 45 (*see* Final Act. 20, 26–28). Therefore, we do not sustain the Examiner's rejection under 35 U.S.C. § 103(a) of independent claims 52 and 62 for the same reasons set forth above with respect to claim 45. For the same reasons, we also do not sustain the rejection of dependent claims 53, 54, 63, and 67. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

Dependent Claims 46-51, 55-59, 64, and 65

Each of claims 46–51, 55–59, 64, and 65 depends, directly or indirectly from one of independent claims 45, 52, and 62. The rejections of these dependent claims do not cure the deficiency in the Examiner's rejection of independent claims 45, 52, and 62. Therefore, we do not sustain

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the Examiner's rejection of dependent claims 46–51, 55–59, 64, and 65 under 35 U.S.C. § 103(a) for the same reasons set forth above with respect to the independent claims.

## **DECISION**

The Examiner's rejection of claims 45–59, 61–65, 67, and 68 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejections of claims 45–59, 61–65, 67, and 68 under 35 U.S.C. § 103(a) are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

## **AFFIRMED**